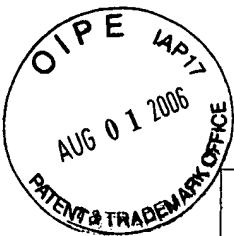


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<b>TRANSMITTAL OF APPEAL BRIEF</b>			Docket No. 249768020US1
In re Application of: Amit D. Agarwal			
Application No. 09/558,313-Conf. #9641	Filing Date April 25, 2000	Examiner R. Laneau	Group Art Unit 3627
Invention: AUTOMATICALLY INITIATING PRODUCT REPLENISHMENT			

**TO THE COMMISSIONER OF PATENTS:**

Transmitted herewith is the Appeal Brief in this application, with respect to the Notice of Appeal filed: March 6, 2006

The fee for filing this Appeal Brief is \$ 500.00

☒ Large Entity ☐ Small Entity

☒ A petition for extension of time is also enclosed.

The fee for the extension of time is \$ 1,020.00

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Dated: August 1, 2006

I hereby certify that this paper (along with any paper referred to as being attached or enclosed) is being deposited with the U.S. Postal Service as Express Mail, Airbill No. EV915638814US, on the date shown below in an envelope addressed to:  
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Docket No.: 249768020US1  
(PATENT)

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Amit D. Agarwal

Application No.: 09/558,313

Confirmation No.: 9641

Filed: April 25, 2000

Art Unit: 3627

For: AUTOMATICALLY INITIATING PRODUCT  
REPLENISHMENT

Examiner: Ronald Laneau

**APPEAL BRIEF**

MS Appeal Brief - Patents  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Sir:

This Appeal Brief is in furtherance of the Notice of Appeal filed in this case on March 6, 2006. The fees required under § 41.20(b)(2) are dealt with in the accompanying TRANSMITTAL OF APPEAL BRIEF.

**I. REAL PARTY IN INTEREST**

The rights of the inventor in this application have been assigned to Amazon.com, Inc., of Seattle, Washington, as recorded at reel 010749, frame 0593.

**II. RELATED APPEALS AND INTERFERENCES**

Neither Appellant, Appellant's legal representative, nor the above-identified Assignee are aware of any other prior or pending appeals, interferences, or judicial proceedings which may be related to, directly affect or be directly affected by, or have a bearing on the Board's decision in the present appeal.

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### III. STATUS OF CLAIMS

Claims 1-47 have been presented, are presently pending, and stand finally rejected.<sup>1</sup>

In a final Office Action dated December 29, 2005 ("Office Action"), claims 1-26, 36-38 and 41-43 were rejected under 35 U.S.C. § 103(a) over U.S. Patent No. 6,026,376 to Kenney ("Kenney") in view of U.S. Patent No. 5,909,023 to Ono et al. ("Ono").

Claims 27-35 and 45-47 were rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono and U.S. Patent No. 5,655,174 to Hirst ("Hirst").

Appellant hereby appeals the rejection of claims 1-47.

### IV. STATUS OF AMENDMENTS

No amendments have been filed subsequent to the Office Action.

### V. SUMMARY OF CLAIMED SUBJECT MATTER

The present application includes 10 independent claims. Each independent claim is briefly summarized and then reproduced below, together with citations to corresponding portions of the specifications and drawings as required by 37 C.F.R. § 41.37(c)(1)(v). These citations are provided to illustrate specific examples and embodiments of the recited claim language, and are not intended to limit the claims.

#### A. Overview of the Invention

Claims 1-47 are directed to techniques for automatically initiating the replenishment of items such as consumable physical products. These techniques establish a date on which an item presently being used by a consumer should probably be replenished. In one aspect, a date for replenishment is based upon the identity of the item. In another aspect,

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<sup>1</sup> The claims are shown in Appendix A.

an autonomous replenishment recommendation is sent to the consumer through such communication channels as electronic mail, instant messaging, or voicemail. In a further aspect, a replenishment recommendation containing a control that the consumer may, with a single action, use to request replenishment of the items is provided. In still another aspect, upon determining that an item should be replenished, the item is automatically replenished without requiring any action of the consumer.

By anticipating a consumer's need to replenish an item, and providing a convenient way for the consumer to replenish the item, the claimed techniques facilitate various ways for consumers to replenish consumable items.

B. Independent Claims on Appeal

The rejected independent claims are generally directed to anticipating a consumer's need to replenish a product, and providing a convenient way for the consumer to replenish the product.

1. Claim 1

Independent claim 1 is directed to a method in a data processing system for automatically initiating the replenishment of a consumable product. The method involves the use of an indication that includes a control to request replenishment of the product. The control enables a consumer to request replenishment of the product by performing a single action. The method comprises the following:

- on a first date, fulfilling an order by a consumer for a first instance of the product (See e.g., Specification, 4:9-13);
- based upon the first date, estimating a second date by which the first instance of the product will be fully consumed (See e.g., *Id.*, 3:7-13 and 4:9-24);

- before the second date, providing to the consumer an indication that the product should be replenished, the indication including a control usable by the consumer to request replenishment of the product by performing a single action (See e.g., *Id.*, 3:7-13 and 6:3-10);
- receiving an indication that the control was used by the consumer to request replenishment of the product (See e.g., *Id.*, 3:13-19); and
- in response solely to receiving this indication, ordering a second instance of the product to replenish the first instance (See e.g., *Id.*, 3:13-19).

## 2. Claim 2

Independent claim 2 is directed to a method in a data processing system for ordering an item. The method involves the use of an indication that includes a user interface control to request replenishment of the item. The method comprises the following:

- on a first date, fulfilling an order by a consumer for a first item (See e.g., Specification, 4:9-13);
- determining a target date for suggesting replenishment of the first item, the target date based upon the first date and the identity of the first item (See e.g., *Id.*, 3:7-13 and 4:9-24);
- on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a user interface control that is usable by the consumer to request replenishment of the first item (See e.g., *Id.*, 3:6-13 and 6:3-10);
- receiving an indication that the control was used by the consumer to request replenishment of the first item (See e.g., *Id.*, 3:13-19); and
- in response solely to receiving this indication, ordering a second item to replenish the first item (See e.g., *Id.*, 3:13-19).

### 3. Claim 15

Independent claim 15 is directed to a computer-readable medium whose contents cause a computer system to order an item. Ordering the item involves the use of an indication that includes a user interface control to request replenishment of the item. The contents cause the computer system to order the item by:

- receiving an indication of an order by a consumer for a first item having a first date (See e.g., Specification, 4:9-13);
- determining a target date based upon the identity of the first item (See e.g., *Id.*, 3:7-13 and 4:9-24);
- on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a user interface control that is usable by the consumer to request replenishment of the first item (See e.g., *Id.*, 3:6-13 and 6:3-10);
- receiving an indication that the control was used by the consumer to request replenishment of the first item (See e.g., *Id.*, 3:13-19); and
- in response solely to receiving this indication, order a second item to replenish the first item (See e.g., *Id.*, 3:13-19).

### 4. Claim 27

Independent claim 27 is directed to a method in a data processing system for assessing item replenishment. The method involves the use of a unilateral transmission of a communication indicating that an item should be replenished. The method comprises the following:

- determining that a purchasing entity possesses an item (See e.g., Specification, 4:9-13);
- determining an expiration time for the item (See e.g., *Id.*, 3:7-13 and 4:9-24); and

- scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished (See e.g., *Id.*, 4:1-16 and 6:1-27).

#### 5. Claim 31

Independent claim 31 is directed to a computer-readable medium whose contents cause a data processing system to assess item replenishment. Assessing item replenishment involves the use of a unilateral transmission of a communication indicating that an item should be replenished. The contents cause the data processing system to assess item replenishment by:

- determining that a purchasing entity is using an item (See e.g., Specification, 4:9-13);
- determining an expiration time for the item (See e.g., *Id.*, 3:7-13 and 4:9-24); and
- scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished (See e.g., *Id.*, 4:1-16 and 6:1-27).

#### 6. Claim 35

Independent claim 35 is directed to a system for automatic item replenishment. The system comprises the following:

- a replenishment targeting subsystem that, for a particular item purchased by a purchaser on a purchased date, determines a target date for replenishment of the item (See e.g., Specification, 3:7-13 and 4:9-24);
- a replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem, at a time at which the purchaser is not engaged in an

electronic shopping activity, a replenishment proposal to order replenishment for the item ; and

- a replenishment ordering subsystem that orders a replacement for the item responsive to an affirmative response to the replenishment proposal from the purchaser (See e.g., *Id.*, 3:7-21 and 6:1-27).

#### 7. Claim 36

Independent claim 36 is directed to a computer memory containing an item replenishment data structure. The item replenishment data structure comprises the following:

- a plurality of entries, each entry comprising,
  - an identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed,
  - such that, on a current date, for each entry indicating the current date as its target date, a unilateral communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry (See e.g., Specification, 6:24-7:6 and 7:24-8:5).

#### 8. Claim 38

Independent claim 38 is directed to a generated data signal conveying an item replenishment data structure. The item replenishment data structure comprises the following:

- a plurality of entries, each entry comprising,



- an identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed,
- such that, on a current date, for an entry indicating the current date as its target date, a unilateral communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry (See *e.g.*, Specification, 6:24-7:6 and 7:24-8:5).

9. Claim 39

Independent claim 39 is directed to a method in a computer system for automatically replenishing an item. The method involves replenishing an item without intervention by a consumer. The method comprises the following:

- determining that a consumer is using an item (See *e.g.*, Specification, 4:9-13);
- determining a target date for replenishing the item (See *e.g.*, *Id.*, 3:7-13 and 4:9-24); and
- without intervention by the consumer, placing an order on the consumer's behalf for replenishment of the item within a predetermined tolerance of the target replenishment date (See *e.g.*, *Id.*, 8:28-9:3).

10. Claim 41

Independent claim 41 is directed to a method in a data processing system for suggesting item replenishment. The method involves unilaterally suggesting replenishment of an item based on a condition for suggesting replenishment of the item. The method comprises the following:

- determining that a purchasing entity is using an item (See e.g., Specification, 4:9-13);
- establishing a condition for suggesting replenishment of the item;
- testing the condition;
- when testing indicates that the condition is satisfied, raising an event (See e.g., *Id.*, 7:24-9:15); and
- when the event is raised, unilaterally suggesting replenishment of the item to the purchasing entity (See e.g., *Id.*, 7:24-9:15).

#### VI. GROUND OF REJECTION TO BE REVIEWED ON APPEAL

- A. Is the rejection of claims 1-26, 36-38 and 41-43 under 35 U.S.C. § 103(a) over Kenney in view of Ono proper?
- B. Is the rejection of claims 27-35 and 45-47 under 35 U.S.C. § 103(a) over Kenney in view of Ono and Hirst proper?
- C. Has the Office Action presented a *Prima Facie* case for the rejection of claims 39-44 even though the Office Action does not provide any indication of where and how the prior art discloses or suggests elements of these claims?

#### VII. ARGUMENT

##### A. Rejections Under 35 U.S.C. § 103(a)

##### 1. Legal Standards for Obviousness

Claims 1-38, 42, 43 and 45-47 on appeal stand rejected as being obvious under 35 U.S.C. § 103(a). To properly reject claims as being obvious under 35 U.S.C. § 103(a), "the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d (BNA) 1955, 1956 (Fed. Cir. 1993). "A *prima facie* case of obviousness is established when the teachings from the prior art itself

would appear to have suggested the claimed subject matter to a person of ordinary skill in the art." *Id.* (quoting *In re Bell*, 991 F.2d 781, 782, 26 U.S.P.Q.2d (BNA) 1529, 1531 (Fed. Cir. 1993)). The Examiner is not allowed to use hindsight gleaned from the invention itself to modify references. *Uniroyal, Inc. v. Rudkin-Wiley Corp.*, 837 F.2d 1044, 1050-51 (Fed. Cir. 1988). Furthermore, "[t]he mere fact that the prior art may be modified in the manner suggested by the Examiner does not make the modification obvious unless the prior art suggested the desirability of the modification." *In re Fritch*, 972 F.2d 1260, 1266 (Fed. Cir. 1992). Although a prior art device "may be capable of being modified to run the way [the patent applicant's] apparatus is claimed, there must be a suggestion or motivation in the reference to do so." *In re Mills*, 916 F.2d 680, 16 U.S.P.Q.2d 1430 (Fed. Cir. 1990).

Under these standards, Appellant's invention would not have been obvious. The Examiner has not identified prior art references that disclose all the elements of pending claims 1-38, 41-43 and 45-47. Accordingly, the rejection of these claims should be reversed.

## B. Overview of the Cited References

### 1. The Kenney Reference

Kenney describes an electronic shopping system that allows a shopper to travel through a virtual store, to look at specific products, to request information about products, to select products for purchase, and to make and print lists. (9:1-6.) In Kenney, the shopper first creates a list of items that may later be reordered, called a reorder list. (11:21-24.) When the shopper is later shopping, the shopper can display the items in the reorder list, and select items from the reorder list to be added to a current list of items. (11:13-15.) The shopper may also enter new items into the current list. (11:15.) When the shopper finishes shopping, the shopper controls his or her local computer to automatically organize the items in the current list, and print it if desired. (11:15-20.)

Although Kenney describes displaying visual representations of products to indicate to a shopper that the displayed products need to be reordered, Kenney contains no indication of a control or a set of controls that may be used to request replenishment of the product(s). Kenney also does not teach or suggest determining a target date on which the replenishment of the items is to be proposed. Rather, the extent to which Kenney facilitates proposing a replenishment of an item is permitting the user to select the item to store in a reorder list, in which the item appears at all subsequent times. Kenney further does not teach or suggest suggesting replenishment of an item when testing a condition for suggesting replenishment of the item indicates that a condition is satisfied. Rather, Kenney displays the reorder list of items in response to a user's requests to display the reorder list, without testing any condition for suggesting replenishment of a particular item. As such, Kenney describes exclusively procedural techniques that perform any such testing only in response to the shopper visiting a shopping website.

## 2. The Ono Reference

Ono describes a service offering system that supplies services matching user specific needs and conditions. (Abstract.) The service offering system stores purchase history information regarding each good purchased by each user. (1:65-2:1.) Upon receiving a user identifier, the service offering system searches the purchase history information of the identified user and calculates a purchase interval for each good purchased by the user and, for each good, determines whether the time corresponding to the purchase interval has lapsed after the latest purchased date. (2:1-10; 8:28-36.) The service offering system then provides the user information regarding the goods whose time corresponding to the purchase interval has lapsed after the latest purchased date. (2:10-16; 8:36-40.)

Although Ono describes providing information regarding a good whose purchase interval has lapsed, Ono contains no indication of providing this information on a target date. Rather, Ono describes a system that, only in response to receiving user

identification information, calculates a purchase interval for each good, judges whether the time corresponding to the purchase interval has lapsed for each good, and transmits information of the goods whose corresponding times have lapsed. (See e.g., 4:60-63 and Figures 1, 3, 14 and 15.) As such, Ono describes exclusively procedural techniques that perform any such testing for lapsed goods only in response to a user providing his or her user identification information to the system. Ono also does not teach or suggest a control or a set of controls that may be used to request replenishment of good(s).

### 3. The Hirst Reference

Hirst describes a system for estimating the consumption of a printing supply, such as a toner, in a printer. (Abstract.) The system uses a measurement of the number of pixels that have been printed and a measured ambient condition, such as relative humidity, to estimate the present level of consumption of the printing supply. (Abstract; 2:16-24, 5:11-32, and Figure 6.)

Although Hirst describes providing a warning message to indicate consumption of a printing supply, Hirst contains no indication of providing the warning message at a time preceding a determined expiration time of the printing supply. Rather, Hirst provides a warning only when the incremental estimates of consumption surpass a limit.

### C. Rejection of the Claims

#### 1. Claims 1 and 44

Claim 1 is rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono.

##### a. Claim 1

Independent claim 1 reads as follows:

A method in a data processing system for automatically initiating the replenishment of a consumable product, comprising:

on a first date, fulfilling an order by a consumer for a first instance of the product;

based upon the first date, estimating a second date by which the first instance of the product will be fully consumed;

before the second date, providing to the consumer an indication that the product should be replenished, the indication including a control usable by the consumer to request replenishment of the product by performing a single action;

receiving an indication that the control was used by the consumer to request replenishment of the product; and

in response solely to receiving the indication, ordering a second instance of the product to replenish the first instance.

Appellant respectfully submits that Kenny and Ono, alone or in combination, fail to teach or suggest "before the second date, providing to the consumer an indication that the product should be replenished, the indication including a control usable by the consumer to request replenishment of the product by performing a single action."

The Office Action characterizes Kenney's Figures 5 and 7 and discussion at 12:50-54 of displaying products to a shopper as disclosing a control usable by the consumer to request replenishment. Appellant respectfully disagrees. In one aspect, as described above in Section VII.B.1, Kenney describes displaying visual representations of products to indicate to a shopper that the displayed products need to be reordered. However, Kenney fails to disclose or suggest a control or set of controls that may be used to request replenishment of the product, as recited in claim 1. The Examiner has not identified any portion of Kenney that teaches or suggests an indication that includes a control usable by the consumer to request replenishment of the product, and the Examiner does not contend that Ono involves such an indication. Indeed, Ono also fails to disclose or suggest an

indication that includes a control usable by the consumer to request replenishment of the product.

In a second aspect, the Examiner acknowledges that "Kenney does not teach the step of requesting replenishment of the product by performing a single action," but asserts that "a user is normally required to reorder a product by a single click over the Internet since most of the needed products are already stored in the user profile for reordering purposes." (Office Action, December 29, 2005, p. 4.) As described above, Kenney fails to teach or suggest a control for requesting replenishment. Appellant respectfully submits that there is no motivation to combine Kenney with a single click web page, as discussed below. Even so, using Kenney with a web page that allows for the reordering of a product by performing a single click over the Internet still would not teach the recited indication including a control usable by the consumer to request replenishment of the product by performing a single action. Using the Examiner's proposed combination, a user, after viewing Kenney's display of a product that needs to be reordered, first has to navigate to the single click ordering web page, and then activate the single click ordering control to request replenishment of the product. The user actions of (1) first navigating to the single click ordering web page and (2) then activating the single click ordering control, amount to more than the single action control, as recited in claim 1.

Appellant further submits that there is no proper motivation to combine the references, or otherwise to modify the references, even if they collectively teach the recited invention. The Examiner's conclusory statement that "a user is normally required to reorder a product by a single click over the Internet since most of the needed products are already stored in the user profile for reordering purposes" is insufficient to provide proper motivation to combine the teachings of Kenney with a control usable by the consumer to request replenishment of a product. Specifically, the Examiner has not pointed to any teaching or suggestion within the prior art that supports his conclusory statement that a user is normally required to reorder a product by a single click over the Internet. Kenney contains no suggestion or motivation for these modifications.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 1, and the rejection of this claim should be reversed.

b. Claim 44

Claim 44 depends directly from claim 1. Thus, the rejection of claim 44 is improper for at least the same reasons set forth above for claim 1. The rejection of claim 44 is also improper, and should be reversed, for failing to present a *prima facie* case of obviousness. More specifically, the Examiner indicates in the Office Action Summary page of the December 29, 2005 Office Action that claim 44 is rejected. However, the Examiner does not provide any indication in the Office Action of where and how the prior art teaches or suggests the recited "wherein the control contained in the received indication includes a defined region in which the user may perform a single mouse click in order to request replenishment of the product." As such, the Examiner has not presented a *prima facie* case for the rejection of claim 44, and the rejection of this claim should be reversed.

2. Claims 2-14

Claims 2-14 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono.

a. Claim 2

Independent claim 2 reads as follows:

A method in a data processing system for ordering an item, comprising:  
on a first date, fulfilling an order by a consumer for a first item;  
determining a target date for suggesting replenishment of the first item, the  
target date based upon the first date and the identity of the first item;  
on the target date, providing to the consumer an indication that the first item  
should be replenished, the indication including a user interface control  
usable by the consumer to request replenishment of the first item;



receiving an indication that the control was used by the consumer to request replenishment of the first item; and  
in response solely to receiving the indication, ordering a second item to replenish the first item.

Appellant respectfully submits that Kenny and Ono, alone or in combination, fail to teach or suggest "on a first date, fulfilling an order by a consumer for a first item," "determining a target date for suggesting replenishment of the first item," and "on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a user interface control usable by the consumer to request replenishment of the first item."

In one aspect, as described above with respect to claim 1, Kenney does not teach or suggest an indication that includes a control usable by the consumer to request replenishment of the product. Accordingly, Kenney could not teach or suggest "the indication including a user interface control usable by the consumer to request replenishment of the first item," as recited in claim 2. The Examiner does not contend that Ono involves such an indication. Indeed, Ono also fails to disclose or suggest an indication that includes a user interface control usable by the consumer to request replenishment of the first item.

In a second aspect, the Examiner acknowledges that "Kenney does not disclose the date on which the system provides the indication to the consumer." (Office Action, December 29, 2005, p. 2.) However, the Examiner argues as follows:

However, Ono discloses a purchase history information of each good purchased by a user that is stored at a service offering system and in response to an input of identification information from a service use system, the service offering system searches the purchase history information of the user corresponding to the user identifier and calculates a purchase interval of each good purchase by a user, the service offering system judges, for each good whose purchase interval was calculated, whether the time corresponding to the purchase interval has lapsed after

the latest purchase day and the service offering system transmits information of the good whose time corresponding to the purchase interval has lapsed to the service via a communication network and displaying information at the service use system (see abs).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit information of the good whose time purchase has lapsed or to provide an indication to the consumer on or before the target date, so the consumer will not run out of the item as taught by Ono into the system of Kenney because it would estimate a demand occurrence time for each good and supply a user with the merchandise information at the estimated time of next purchase.

(Office Action, December 29, 2005, pp. 2-3.) Appellant respectfully disagrees. As described above in Section VII.B.2, Ono fails to teach or suggest providing information regarding a good whose purchase interval has lapsed on a target date. Appellant respectfully submits that there is no motivation to combine Kenney with Ono, as discussed below. Even so, combining Kenney with Ono still would not teach the recited determining a target date for suggesting replenishment of a first item and, on the target date, providing to the consumer an indication that the first item should be replenished.

This rejection is inadequately supported because the Examiner has not pointed to anything in the prior art that suggests or provides a motivation to combine Kenney and Ono. A motivation or suggestion to combine must come from the prior art. *In re Zurko*, 258 F.3d 1379, 1385-86, 59 U.S.P.Q.2d (BNA) 1693, 1697 (Fed. Cir. 2001); *In re Rijckaert*, 9 F.3d at 1532, 28 U.S.P.Q.2d (BNA) at 1956. The Examiner has not pointed to any teaching or suggestion within the prior art that supports his conclusory statements about a motivation or suggestion to combine. Rather, the Examiner's rejections are based on a legally impermissible use of hindsight. The Examiner recognizes differences between Appellant's claimed invention and the prior art, and attempts to attribute those improvements to some sort of common sense or background knowledge available to anyone of ordinary skill in the art at the time of the invention. The Federal Circuit has consistently held that reliance on such assertions of common sense or basic knowledge is impermissible. *Id.*; see also *In re Sang Su Lee*, 277 F.3d 1338, 61 U.S.P.Q.2d (BNA) 1430

(Fed. Cir. 2002). No teaching or motivation from within the prior art suggests combining Kenney with Ono, and the Examiner's conclusory statements are insufficient to provide proper motivation to combine the teachings of Kenney with Ono.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 2, and the rejection of this claim should be reversed.

b. Claim 3

Claim 3 depends directly from claim 2. Thus, the rejection of claim 3 is improper for at least the same reasons set forth above for claim 2. The rejection of claim 3 is also improper, and should be reversed, for the following additional reason. Claim 3 reads as follows:

The method of claim 2 wherein the control is usable by the consumer to request replenishment of the first item by performing a single action.

As described above with respect to claim 1, Kenney does not teach or suggest a control that is usable by the consumer to request replenishment of the product. Accordingly, Kenney could not teach or suggest "the [user interface] control . . . usable by the consumer to request replenishment of the first item by performing a single action." The Examiner does not contend that Ono involves such a user interface control. Indeed, Ono fails to disclose or suggest an indication that includes a user interface control usable by the consumer to request replenishment of the first item by performing a single action.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claim 3, and the rejection of this claim should be reversed.

c. Claims 4-14

Claims 4-14 depend directly from claim 2. Thus, the rejection of claims 4-14 is improper for at least the same reasons set forth above for claim 2. Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claims 4-14, and the rejection of these claims should be reversed.

3. Claims 15-26

Claims 15-26 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono.

a. Claim 15

Independent claim 15 reads as follows:

A computer-readable medium whose contents cause a computer system to order an item by:

- receiving an indication of an order by a consumer for a first item having a first date;
- determining a target date based upon the identity of the first item;
- on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a user interface control usable by the consumer to request replenishment of the first item;
- receiving an indication that the control was used by the consumer to request replenishment of the first item; and
- in response solely to receiving the indication, ordering a second item to replenish the first item.

Appellant respectfully submits that Kenney and Ono, alone or in combination, fail to teach or suggest "receiving an indication of an order by a consumer for a first item having a first date," "determining a target date based upon the identity of the first item," and "on the target date, providing to the consumer an indication that the first item should be

replenished, the indication including a user interface control usable by the consumer to request replenishment of the first item."

In one aspect, as described above with respect to claim 1, Kenney does not teach or suggest an indication that includes a control usable by the consumer to request replenishment of the product. Accordingly, Kenney could not teach or suggest "the indication including a user interface control usable by the consumer to request replenishment of the first item." The Examiner does not contend that Ono involves such an indication. Indeed, Ono also fails to disclose or suggest an indication that includes a user interface control usable by the consumer to request replenishment of the first item.

In a second aspect, the Examiner acknowledges that "Kenney does not disclose the date on which the system provides the indication to the consumer." (Office Action, December 29, 2005, p. 2.) However, the Examiner argues as follows:

However, Ono discloses a purchase history information of each good purchased by a user that is stored at a service offering system and in response to an input of identification information from a service use system, the service offering system searches the purchase history information of the user corresponding to the user identifier and calculates a purchase interval of each good purchase by a user, the service offering system judges, for each good whose purchase interval was calculated, whether the time corresponding to the purchase interval has lapsed after the latest purchase day and the service offering system transmits information of the good whose time corresponding to the purchase interval has lapsed to the service via a communication network and displaying information at the service use system (see abs).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit information of the good whose time purchase has lapsed or to provide an indication to the consumer on or before the target date, so the consumer will not run out of the item as taught by Ono into the system of Kenney because it would estimate a demand occurrence time for each good and supply a user with the merchandise information at the estimated time of next purchase.

(Office Action, December 29, 2005, pp. 2-3.) Appellant respectfully disagrees. As described above in Section VII.B.2, Ono fails to teach or suggest providing information regarding a good whose purchase interval has lapsed on a target date. Appellant respectfully submits that there is no motivation to combine Kenney with Ono, as discussed below. Even so, combining Kenney with Ono still would not teach the recited determining a target date based upon the identity of the first item and, on the target date, providing to the consumer an indication that the first item should be replenished.

As discussed above with respect to claim 2, this rejection is inadequately supported because the Examiner has not pointed to anything in the prior art that suggests or provides a motivation to combine Kenney and Ono. No teaching or motivation from within the prior art suggested combining Kenney with Ono, and the Examiner's conclusory statements are insufficient to provide proper motivation to combine the teachings of Kenney with Ono.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 15, and the rejection of this claim should be reversed.

b. Claims 16 and 18-26

Claims 16 and 18-26 depend directly from claim 15. Thus, the rejection of claims 16 and 18-26 is improper for at least the same reasons set forth above for claim 15. Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claims 16 and 18-26, and the rejection of these claims should be reversed.

c. Claim 17

Claim 17 depends indirectly from claim 15. Thus, the rejection of claim 17 is improper for at least the same reasons set forth above for claim 15. The rejection of claim

17 is also improper, and should be reversed, for the following additional reason. Claim 17 reads as follows:

The computer-readable medium of claim 16 wherein the control is usable by the consumer to request replenishment of the first item by performing a single action.

As described above with respect to claim 1, Kenney does not teach or suggest a control that is usable by the consumer to request replenishment of the product. Accordingly, Kenney could not teach or suggest "the [user interface] control . . . usable by the consumer to request replenishment of the first item by performing a single action." The Examiner does not contend that Ono involves such a user interface control. Indeed, Ono also fails to disclose or suggest an indication that includes a user interface control usable by the consumer to request replenishment of the first item by performing a single action.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claim 17, and the rejection of this claim should be reversed.

4. Claims 27-30

Claims 27-30 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono and Hirst.

a. Claim 27

Independent claim 27 reads as follows:

A method in a data processing system for assessing item replenishment, comprising:

determining that a purchasing entity possesses an item;  
determining an expiration time for the item; and

scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished.

Appellant respectfully submits that Kenney, Ono, and Hirst, alone or in combination, fail to teach or suggest "scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished."

The Examiner acknowledges that Kenney and Ono do not teach scheduling a time for transmission of a unilateral transmission indicating that the item should be purchased. (Office Action, December 29, 2005, p. 5.) However, the Examiner argues as follows:

However, Hirst discloses a processor 38 providing a signal to controls and displays 42 to indicate a warning message reminder to schedule a reordering process for a particular product and sometimes the reordering is done automatically as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit information of the good whose time purchase has lapsed or to provide an indication to the consumer on or before the target date, so the consumer will not run out of the item as taught by Ono into the system of Kenney because it would estimate a demand occurrence time for each good and supply a user with the merchandise information at the estimated time of next purchase. And it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the message indication and the automating reordering as taught by Hirst into the combined systems of both Kenney and Ono because it would ensure that customers are aware of an upcoming event and that products are ordered in a timely fashion.

(Office Action, December 29, 2005, p. 5.) Appellant respectfully disagrees. As described above in Section VII.B.3, Hirst fails to teach or suggest providing the warning message at a time preceding the determined expiration time of the product. Appellant respectfully submits that there is no motivation to combine Kenney with Ono and Hirst, as discussed below. Even so, combining Kenney with Ono and Hirst still would not teach the recited



scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished.

This rejection is inadequately supported because the Examiner has not pointed to anything in the prior art that suggests or provides a motivation to combine Kenney, Ono, and Hirst. As discussed above in Section VII.C.2.a, a motivation or suggestion to combine must come from the prior art, and no teaching or motivation from within the prior art suggested combining Kenney with Ono and Hirst, and the Examiner's conclusory statements are insufficient to provide proper motivation to combine Kenney, Ono, and Hirst.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 27, and the rejection of this claim should be reversed.

b. Claims 28-30

Claims 28-30 depend directly or indirectly from claim 27. Thus, the rejection of claims 28-30 is improper for at least the same reasons set forth above for claim 27. Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claims 28-30, and the rejection of these claims should be reversed.

5. Claims 31-34

Claims 31-34 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono and Hirst.

a. Claim 31

Independent claim 31 reads as follows:

A computer-readable medium whose contents cause a data processing system to assess item replenishment by:

determining that a purchasing entity possesses an item;

determining an expiration time for the item; and

scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished.

Appellant respectfully submits that Kenney, Ono, and Hirst, alone or in combination, fail to teach or suggest "scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished."

The Examiner acknowledges that Kenney and Ono do not teach scheduling a time for transmission of a unilateral transmission indicating that the item should be purchased. (Office Action, December 29, 2005, p. 5.) However, the Examiner argues as follows:

However, Hirst discloses a processor 38 providing a signal to controls and displays 42 to indicate a warning message reminder to schedule a reordering process for a particular product and sometimes the reordering is done automatically as claimed.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to transmit information of the good whose time purchase has lapsed or to provide an indication to the consumer on or before the target date, so the consumer will not run out of the item as taught by Ono into the system of Kenney because it would estimate a demand occurrence time for each good and supply a user with the merchandise information at the estimated time of next purchase. And it would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the message indication and the automating reordering as taught by Hirst into the combined systems of both Kenney and Ono because it would ensure that customers are aware of an upcoming event and that products are ordered in a timely fashion.

(Office Action, December 29, 2005, p. 5.) Appellant respectfully disagrees. As described above in Section VII.B.3, Hirst fails to teach or suggest providing the warning message at a time preceding the determined expiration time of the product. Appellant respectfully submits that there is no motivation to combine Kenney with Ono and Hirst, as discussed below. Even so, combining Kenney with Ono and Hirst still would not teach the recited scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished.

This rejection is inadequately supported because the Examiner has not pointed to anything in the prior art that suggests or provides a motivation to combine Kenney, Ono, and Hirst. As discussed above in Section VII.C.2.a, a motivation or suggestion to combine must come from the prior art, and no teaching or motivation from within the prior art suggested combining Kenney with Ono and Hirst, and the Examiner's conclusory statements are insufficient to provide proper motivation to combine Kenney, Ono, and Hirst.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 31, and the rejection of this claim should be reversed.

b. Claims 32-34

Claims 32-34 depend directly or indirectly from claim 31. Thus, the rejection of claims 28-30 is improper for at least the same reasons set forth above for claim 31. Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claims 32-34, and the rejection of these claims should be reversed.

6. Claims 35 and 45-47

Claims 35 and 45-47 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono and Hirst.

a. Claim 35

Independent claim 35 reads as follows:

A system for automatic item replenishment, comprising:

- a replenishment targeting subsystem that, for a particular item purchased by a purchaser on a purchased date, determines a target date for replenishment of the item;
- a replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem, at a time at which the purchaser is not engaged in an electronic shopping activity, a replenishment proposal to order a replacement for the item; and
- a replenishment ordering subsystem that orders a replacement for the item responsive to an affirmative response to the replenishment proposal from the purchaser.

Appellant respectfully submits that Kenny, Ono, and Hirst, alone or in combination, fail to teach or suggest "a replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem, at a time at which the purchaser is not engaged in an electronic shopping activity, a replenishment proposal to order a replacement for the item."

The Examiner acknowledges that Kenney and Ono do not teach scheduling a time for transmission of a unilateral transmission indicating that the item should be purchased, but asserts that Hirst discloses providing a warning message reminder to schedule a reordering process for a particular product. (Office Action, December 29, 2005, p. 5.) For the following reasons, Appellant respectfully disagrees. In one aspect, as discussed above in Section VII.B.3, Hirst fails to teach or suggest providing a warning message at a time preceding the determined expiration time of the product. Accordingly, Hirst could not disclose or suggest transmitting to the purchaser in advance of the target date determined

for the item a replenishment proposal to order a replacement for the item. The Examiner has not identified any portion of Hirst that teaches or suggests a replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem, at a time at which the purchaser is not engaged in an electronic shopping activity, a replenishment proposal to order a replacement for the item.

In a second aspect, Appellant respectfully submits that there is no motivation to combine Kenney with Ono and Hirst, as discussed below. Even so, combining Kenney with Ono and Hirst still would not teach the recited replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem, at a time at which the purchaser is not engaged in an electronic shopping activity, a replenishment proposal to order a replacement for the item.

This rejection is inadequately supported because the Examiner has not pointed to anything in the prior art that suggests or provides a motivation to combine Kenney, Ono, and Hirst. As discussed above in Section VII.C.2.a, a motivation or suggestion to combine must come from the prior art, and no teaching or motivation from within the prior art suggests combining Kenney with Ono and Hirst, and the Examiner's conclusory statements are insufficient to provide proper motivation to combine Kenney, Ono, and Hirst.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 35, and the rejection of this claim should be reversed.

b. Claims 45-47

Claims 45-47 depend directly from claim 35. Thus, the rejection of claims 45-47 is improper for at least the same reasons set forth above for claim 35. Accordingly, the

Examiner has failed to identify prior art references that disclose the elements recited by claims 45-47, and the rejection of these claims should be reversed.

7. Claims 36 and 37

Claims 36-38 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono.

a. Claim 36

Independent claim 36 reads as follows:

A computer memory containing an item replenishment data structure, the data structure comprising a plurality of entries, each entry comprising an identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed, such that, on a current date, for each entry indicating the current date as its target date, a unilateral communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry.

Appellant respectfully submits that Kenny and Ono, alone or in combination, fail to teach or suggest an item replenishment data structure comprised of a plurality of entries, each entry comprising "an identification of a consumer, an identification of an item, and *an indication of a target date on which the replenishment of the item is to be proposed.*" (Emphasis added.)

As discussed above in Section VII.C.2.a, the Examiner acknowledges that Kenny does not disclose a target date for providing an indication to a customer. Appellant respectfully submits that the sections of Ono cited by the Examiner do not teach or suggest determining a target date for suggesting the replenishment of an item. Accordingly, the cited sections of Ono could not further teach or suggest a data structure comprised of a plurality of entries, each entry comprising an indication of a target date for suggesting replenishment of an item. Indeed, the Examiner has not identified any portion of Ono that

teaches or suggests an item replenishment data structure comprised of a plurality of entries, each entry comprising an indication of a target date on which the replenishment of the item is to be proposed, as recited.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 36, and the rejection of this claim should be reversed.

b. Claim 37

Claim 37 depends directly from claim 36. Thus, the rejection of claim 37 is improper for at least the same reasons set forth above for claim 36. Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by claim 37, and the rejection of this claim should be reversed.

8. Claim 38

Claim 38 is rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono. Independent claim 38 reads as follows:

A generated data signal conveying a item replenishment data structure, the data structure comprising a plurality of entries, each entry comprising an identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed, such that, on a current date, for an entry indicating the current date as its target date, a unilateral communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry.

Appellant respectfully submits that Kenney and Ono, alone or in combination, fail to teach or suggest an item replenishment data structure comprised of a plurality of entries, each entry comprising "an identification of a consumer, an identification of an item, and *an indication*

*of a target date on which the replenishment of the item is to be proposed."* (emphasis added.)

As discussed above in Section VII.C.2.a, the Examiner acknowledges that Kenny does not disclose a target date for providing an indication to a customer. Appellant respectfully submits that the sections of Ono cited by the Examiner do not teach or suggest determining a target date for suggesting the replenishment of an item. Accordingly, the cited sections of Ono could not further teach or suggest a data structure comprised of a plurality of entries, each entry comprising an indication of a target date for suggesting replenishment of an item. Indeed, the Examiner has not identified any portion of Ono that teaches or suggests an item replenishment data structure comprised of a plurality of entries, each entry comprising an indication of a target date on which the replenishment of the item is to be proposed, as recited.

Accordingly, the Examiner has failed to identify prior art references that disclose the elements recited by independent claim 38, and the rejection of this claim should be reversed.

9. Claims 39 and 40

Although the December 29, 2005 Office Action indicates in its Office Action Summary page that claims 39 and 40 are rejected, the Office Action fails to consider claims 39 and 40. Accordingly, Appellant requests that the rejection of claims 39 and 40 be reversed.

a. Claim 39

Independent claim 39 reads as follows:

A method in a computer system for automatically replenishing an item, comprising:

determining that a consumer is using an item;



determining a target date for replenishing the item; and  
without intervention by the consumer, placing an order on the consumer's  
behalf for replenishment of the item within a predetermined tolerance  
of the target replenishment date.

Although the Examiner indicates in the Office Action Summary page of the December 29, 2005 Office Action that claim 39 is rejected, the Examiner does not provide any indication in the Office Action of where and how the prior art discloses or suggests the recited "without intervention by the consumer, placing an order on the consumer's behalf for replenishment of the item within a predetermined tolerance of the target replenishment date."

As such, the Examiner has not presented a *prima facie* case for the rejection of independent claim 39, and the rejection of this claim should be reversed.

b. Claim 40

Claim 40 depends directly from claim 39. Thus, the rejection of claim 40 is improper for at least the same reasons set forth above for claim 39. Accordingly, the Examiner has not presented a *prima facie* case for the rejection of claim 40, and the rejection of this claim should be reversed.

10. Claims 41-43

Claims 41-43 are rejected under 35 U.S.C. § 103(a) over Kenney in view of Ono.

a. Claim 41

Independent claim 41 reads as follows:

A method in a data processing system for suggesting item replenishment,  
comprising:

determining that a purchasing entity is using an item;  
establishing a condition for suggesting replenishment of the item;  
testing the condition;  
when testing indicates that the condition is satisfied, raising an event; and  
when the event is raised, unilaterally suggesting replenishment of the item to  
the purchasing entity.

The Examiner does not provide any indication in the December 29, 2005 Office Action of where and how the prior art teaches or suggests the recited "when testing [a condition for suggesting replenishment of the item] indicates that the condition is satisfied, raising an event," and "when the event is raised, unilaterally suggesting replenishment of the item to the purchasing entity." Appellant respectfully submits that Kenny and Ono, alone or in combination, fail to teach or suggest the above-recited elements. Rather, as described above in Sections VII.B.1 and VII.B.2, both Kenney and Ono describe exclusively procedural techniques that perform any such testing only in response to a user action.

As such, the Examiner has not presented a *prima facie* case of obviousness of independent claim 41, and the rejection of this claim should be reversed.

b. Claims 42 and 43

Claims 42 and 43 depend directly from claim 41. Thus, the rejection of claims 42 and 43 is improper for at least the same reasons set forth above for claim 41. Accordingly, the Examiner has failed to present a *prima facie* case of obviousness of claims 42 and 43, and the rejection of these claims should be reversed.

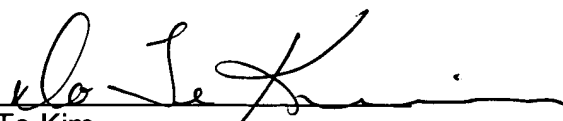
VIII. SUMMARY

Each of claims 1-38 and 45-47 has been improperly rejected, both in that (a) the Examiner has failed to provide prior art references that disclose all of the elements of these claims, and (b) the cited references would not support any rejection of these claims. Each

of claims 39-44 has been improperly rejected, both in that (a) the Examiner has failed to make a *prima facie* case of unpatentability, and (b) the cited references would not support any rejection of these claims. Accordingly, Appellant seeks the reversal of the rejection of claims 1-47.

Dated: August 1, 2006

Respectfully submitted,

By   
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## **APPENDIX A**

### **Claims Involved in the Appeal of Application Serial No. 09/558,313**

1. A method in a data processing system for automatically initiating the replenishment of a consumable product, comprising:
  - on a first date, fulfilling an order by a consumer for a first instance of the product;
  - based upon the first date, estimating a second date by which the first instance of the product will be fully consumed;
  - before the second date, providing to the consumer an indication that the product should be replenished, the indication including a control usable by the consumer to request replenishment of the product by performing a single action;
  - receiving an indication that the control was used by the consumer to request replenishment of the product; and
  - in response solely to receiving the indication, ordering a second instance of the product to replenish the first instance.
  
2. A method in a data processing system for ordering an item, comprising:
  - on a first date, fulfilling an order by a consumer for a first item;
  - determining a target date for suggesting replenishment of the first item, the target date based upon the first date and the identity of the first item;
  - on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a user interface control usable by the consumer to request replenishment of the first item;
  - receiving an indication that the control was used by the consumer to request replenishment of the first item; and
  - in response solely to receiving the indication, ordering a second item to replenish the first item.

3. The method of claim 2 wherein the control is usable by the consumer to request replenishment of the first item by performing a single action.
4. The method of claim 2 wherein the second item is a physical article.
5. The method of claim 2 wherein the second item is a data product.
6. The method of claim 2 wherein the second item is a service.
7. The method of claim 2 wherein the target date is determined based on an average life span of the first item.
8. The method of claim 2 wherein the target date is determined based on an expiration date for the first item.
9. The method of claim 2 wherein the target date is determined based on an availability date for the second item.
10. The method of claim 2 wherein the target date is determined based on the length of the intervals between the prior purchases.
11. The method of claim 2 wherein the consumer has made a plurality of prior purchases of a complement of the first item, and wherein the target date is determined based on the length of the intervals between the prior purchases.
12. The method of claim 2 wherein a target date is determined based on the size of the first item.

13. The method of claim 2 wherein the target date is determined based on information provided by the consumer.

14. The method of claim 2 wherein a target date is determined based on information about the consumer's lifestyle.

15. A computer-readable medium whose contents cause a computer system to order an item by:

- receiving an indication of an order by a consumer for a first item having a first date;
- determining a target date based upon the identity of the first item;
- on the target date, providing to the consumer an indication that the first item should be replenished, the indication including a user interface control usable by the consumer to request replenishment of the first item;
- receiving an indication that the control was used by the consumer to request replenishment of the first item; and
- in response solely to receiving the indication, ordering a second item to replenish the first item.

16. The computer-readable medium of claim 15 wherein the provided indication includes a control usable by the consumer to request replenishment of the first item, the method further comprising:

- receiving an indication that the control was used by the consumer to request replenishment of the first item; and
- in response to receiving the indication, ordering a second item to replenish the first item.

17. The computer-readable medium of claim 16 wherein the control is usable by the consumer to request replenishment of the first item by performing a single action.

18. The computer-readable medium of claim 15 wherein the first date is a date on which the order for the first item was placed.

19. The computer-readable medium of claim 15 wherein the first date is a date on which the order for the first item was fulfilled.

20. The computer-readable medium of claim 15 wherein the target date is determined based on an average life span of the first item.

21. The computer-readable medium of claim 15 wherein the target date is determined based on an expiration date for the first item.

22. The computer-readable medium of claim 15 wherein the target date is determined based on an availability date for the second item.

23. The computer-readable medium of claim 15 wherein the consumer has made a plurality of prior purchases of the first item, and wherein the target date is determined based on the length of the intervals between the prior purchases.

24. The computer-readable medium of claim 15 wherein the consumer has made a plurality of prior purchases of a complement of the first item, and wherein the target date is determined based on the length of the intervals between the prior purchases.

25. The computer-readable medium of claim 15 wherein a target date is determined based on the size of the first item.

26. The computer-readable medium of claim 15 wherein the target date is determined based on information provided by the consumer.

27. A method in a data processing system for assessing item replenishment, comprising:

- determining that a purchasing entity possesses an item;
- determining an expiration time for the item; and
- scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished.

28. The method of claim 27, further comprising delivering the communication at the scheduled time.

29. The method of claim 28 wherein the delivered communication contains a control for ordering an additional item to replenish the item.

30. The method of claim 29, further comprising:

- receiving an indication that the purchasing entity used the control contained in the delivered communication to order an additional item to replenish the item;
- and
- in response to receiving the indication, ordering an additional item to replenish the item.

31. A computer-readable medium whose contents cause a data processing system to assess item replenishment by:

- determining that a purchasing entity is using an item;
- determining an expiration time for the item; and
- scheduling for a time preceding the determined expiration time a unilateral transmission of a communication to the purchasing entity indicating that the item should be replenished.



32. The computer-readable medium of claim 31, further comprising delivering the communication at the scheduled time.

33. The computer-readable medium of claim 32 wherein the delivered communication contains a control for ordering an additional item to replenish the item.

34. The computer-readable medium of claim 33, further comprising:  
receiving an indication that the purchasing entity used the control contained in the delivered communication to order an additional item to replenish the item;  
and  
in response to receiving the indication, ordering an additional item to replenish the item.

35. A system for automatic item replenishment, comprising:  
a replenishment targeting subsystem that, for a particular item purchased by a purchaser on a purchased date, determines a target date for replenishment of the item;  
a replenishment proposal subsystem that transmits to the purchaser in advance of the target date determined for the item by the replenishment targeting subsystem, at a time at which the purchaser is not engaged in an electronic shopping activity, a replenishment proposal to order a replacement for the item; and  
a replenishment ordering subsystem that orders a replacement for the item responsive to an affirmative response to the replenishment proposal from the purchaser.

36. A computer memory containing an item replenishment data structure, the data structure comprising a plurality of entries, each entry comprising an identification of a consumer, an identification of an item, and an indication of a target date on which the

replenishment of the item is to be proposed, such that, on a current date, for each entry indicating the current date as its target date, a unilateral communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry.

37. The computer memory of claim 36 wherein the item replenishment data structure further comprises, for each of a plurality of dates, an indication of the entries indicating the date as their target date.

38. A generated data signal conveying a item replenishment data structure, the data structure comprising a plurality of entries, each entry comprising an identification of a consumer, an identification of an item, and an indication of a target date on which the replenishment of the item is to be proposed, such that, on a current date, for an entry indicating the current date as its target date, a unilateral communication can be transmitted to the consumer identified by the entry proposing the replenishment of the item identified by the entry.

39. A method in a computer system for automatically replenishing an item, comprising  
determining that a consumer is using an item;  
determining a target date for replenishing the item; and  
without intervention by the consumer, placing an order on the consumer's behalf for replenishment of the item within a predetermined tolerance of the target replenishment date.

40. The method of claim 39 wherein the consumer has made a plurality of prior purchases of the item, and wherein the target replenishment date is determined based on the length of the intervals between the prior purchases.

41. A method in a data processing system for suggesting item replenishment, comprising:

- determining that a purchasing entity is using an item;
- establishing a condition for suggesting replenishment of the item;
- testing the condition;
- when testing indicates that the condition is satisfied, raising an event; and
- when the event is raised, unilaterally suggesting replenishment of the item to the purchasing entity.

42. The method of claim 41 wherein the established condition is a temporal condition.

43. The method of claim 41 wherein the established condition is the availability of a replacement item.

44. The method of claim 1 wherein the control contained in the received indication includes a defined region in which the user may perform a single mouse click in order to request replenishment of the product.

45. The system of claim 35, further comprising an electronic mail transmission subsystem that transmits replenishment proposals as electronic mail messages on behalf of the replenishment proposal subsystem.

46. The system of claim 35, further comprising an instant message transmission subsystem that transmits replenishment proposals as instant messages on behalf of the replenishment proposal subsystem.

47. The system of claim 35, further comprising a voicemail transmission subsystem that transmits replenishment proposals as voicemail messages on behalf of the replenishment proposal subsystem.

**EVIDENCE APPENDIX**

No evidence has been entered or is being relied upon in the present application.

**RELATED PROCEEDINGS APPENDIX**

There are no decisions rendered by a court or the Board in any proceeding identified in the Related Appeals and Interferences section.